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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,135	11/25/2003	Ryouichi Ochi	071671-0172	4421
22428 7590 06/04/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER RYMAN, DANIEL J				
ART UNIT 2616		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,135

Applicant(s)

OCHI ET AL.

Examiner

DANIEL J. RYMAN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 40-69 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 68 and 69 are rejected under 35 U.S.C. 102(e) as being anticipated by Huat et al. (USPN 7,013,267).

4. Regarding claims 68 and 69, Huat discloses a method of and system for receiving and processing packets, the method comprising the steps of and the system comprising means for: receiving a plurality of packets over the communication path (col. 7, lines 62-63); dividing each of the plurality of packets into a corresponding plurality of real-time communication packets (col. 7, lines 31-34, where if multiple samples are transmitted in a single packet and if the receiver receives and processes voice samples, then the voice samples must be divided from the single packet, and col. 7, lines 22-24, where the samples are real-time communication packets); and reproducing voice data based on the corresponding plurality of real-time communication packets for each of the plurality of packets (col. 8, lines 10-22).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 40-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huat et al. (USPN 7,013,267) in view of McDonald (USPN 6,480,827).

8. Regarding claims 40 and 54, Huat discloses a method of and system for creating and transmitting voice packets, the method comprising the steps of and the system comprising means for: generating packets based on voice data (col. 3, lines 8-14, where the processor generates multiple voice samples, i.e. packets, based on voice data, see also col. 7, lines 31-34); and combining multiple packets into a corresponding single packet (col. 3, lines 8-14, where a single packet transmitted on the network may contain multiple voice samples, see also col. 7, lines 31-34).

Huat does not expressly disclose determining divisions of utterances represented by the voice data; dividing the voice data into clause units in accordance with the divisions; and

combining, for each of the clause units, every packet of said packets that includes portions of the voice data for the clause unit into a corresponding single packet. However, Huat does disclose determining a voice parameter that “characterizes the spectral and/or temporal content of voice samples” to aid the receiver in recreating lost packets (col. 7, lines 12-17, see also col. 4, lines 47-52). McDonald discloses, in a voice communication system, having a receiver determine whether a particular phoneme is not recognizable due to corruptions (col. 4, lines 39-41) by having the receiver determine divisions of utterances represented by the voice data (col. 2, lines 13-18, where the receiver parses voice data to determine phonemes, see also col. 4, lines 27-35) and dividing the voice data into clause units, i.e. phonemes, in accordance with the divisions (col. 2, lines 13-18, where the data is segmented into units corresponding to phonemes, see also col. 4, lines 27-35). McDonald further discloses that if a particular phoneme is not recognizable then the receiver will choose an estimate of a phoneme to replace the not recognizable phoneme (col. 4, line 41-60, see also col. 6, line 67-col. 7, line 13). It would have been obvious to one of ordinary skill in the art at the time of the invention to have Huat’s system use a phoneme as a “voice parameter”, as set forth in McDonald. To do this, one of ordinary skill in the art would have Huat’s transmitter determine individual phonemes in the voice data (i.e. “determine divisions of utterances represented by the voice data” and “divide the voice data into clause units in accordance with the divisions”), group all speech samples corresponding to that phoneme in a single packet (i.e. “combine, for each of the clause units, every packet of said packets that includes portions of the voice data for the clause unit into a corresponding single packet”) and then transmit the samples together with an indication of the phoneme to the receiver. One of

ordinary skill in the art at the time of invention would have been motivated to do this to ensure that the receiver could reconstruct the voice information.

9. Regarding claims 41 and 55, Huat in view of McDonald discloses transmitting, for each of the clause units, the corresponding single packet over a communication path (Huat: col. 3, lines 8-14, where a single packet transmitted on the network may contain multiple voice samples, and col. 7, lines 12-17, where the voice parameter pertains to all voice samples in the packet, such that if the voice parameter is a phoneme, as outlined above, then all samples in the phoneme should be in the packet).

10. Regarding claims 42 and 58, Huat in view of McDonald discloses producing, for each of the clause units, a corresponding file including the corresponding single packet (Huat: col. 4, lines 16-18, where the transmitter produces a single set of data, i.e. a “file” that includes all the voice samples and the voice parameter).

11. Regarding claims 43 and 59, Huat in view of McDonald discloses transmitting, for each of the clause units, the corresponding file over a communication path (Huat: col. 4, lines 16-18).

12. Regarding claims 44 and 60, Huat in view of McDonald discloses that said producing comprising: including, for each of the clause units, discrimination data in the corresponding file that indicates contents of the corresponding file (Huat: col. 4, lines 16-18, where the voice parameter is, as broadly defined, “discrimination data”).

13. Regarding claims 45 and 61, Huat in view of McDonald discloses determining a communication state as at least one of a first state, a second state, and a third state (Huat: col. 4, lines 22-28, where the system determines the mode of operation it is conducting); transmitting said packets over a communication path in a case where the communication state is determined

to be said first state (Huart: col. 4, lines 22-28, where each sample may be transmitted individually in a given mode, see also col. 3, lines 63-67); transmitting, for each of the clause units, said corresponding single packet over the communication path in a case where the communication state is determined to be said second state (Huart: col. 4, lines 22-28, where multiple samples may be transmitted in a single packet in a given mode, see also col. 3, lines 63-67); and transmitting, for each of the clause units, said corresponding file over the communication path in a case where the communication state is determined to be said third state (Huart: col. 4, lines 22-28, where a single packet may be accompanied by a voice parameter in a given mode where the single packet in conjunction with the voice parameter is the “corresponding file”).

14. Regarding claims 46 and 62, Huart in view of McDonald discloses determining a communication state as at least one of a first state and a second state (Huart: col. 4, lines 22-28, where the system determines the mode of operation it is conducting); transmitting said packets over a communication path in a case where the communication state is determined to be said first state (Huart: col. 4, lines 22-28, where each sample may be transmitted individually in a given mode, see also col. 3, lines 63-67); and transmitting, for each of the clause units, said corresponding single packet over the communication path in a case where the communication state is determined to be said second state (Huart: col. 4, lines 22-28, where multiple samples may be transmitted in a single packet in a given mode, see also col. 3, lines 63-67).

15. Regarding claims 47 and 57, Huart in view of McDonald discloses generating said packets as real-time communication packets (Huart: col. 7, lines 22-24).

16. Regarding claims 48 and 56, Huat in view of McDonald does not expressly disclose retransmitting, upon receiving a retransfer request for a clause unit of said clause units, the corresponding single packet for the clause unit. However, Examiner takes official notice that it is well known to retransmit a packet upon receiving a retransfer request to ensure that the packet is properly received at the receiver. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to retransmit, upon receiving a retransfer request for a clause unit of said clause units, the corresponding single packet for the clause unit. One of ordinary skill in the art at the time of invention would have been motivated to do this to ensure that the packet is properly received.

17. Regarding claims 49 and 63, Huat in view of McDonald does not expressly disclose that said determining comprises: determining said divisions based on a sound level of a voice that produces the utterances represented by the voice data. However, McDonald does disclose that the parsing may be done “in any conventional manner” (col. 4, lines 27-35). Huat discloses that voice characteristics include pitch period, magnitude measure, and frequency measure (col. 7, lines 12-17). As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to use magnitude measure, i.e. sound level, to determine the divisions. One of ordinary skill in the art at the time of invention would have been motivated to do this because magnitude is one way to characterize voice samples.

18. Regarding claims 50 and 64, Huat in view of McDonald does not expressly disclose that said determining comprises: determining said divisions based on a sound pitch of a voice that produces the utterances represented by the voice data. However, McDonald does disclose that the parsing may be done “in any conventional manner” (col. 4, lines 27-35). Huat discloses that

voice characteristics include pitch period, magnitude measure, and frequency measure (col. 7, lines 12-17). As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to use pitch to determine the divisions. One of ordinary skill in the art at the time of invention would have been motivated to do this because pitch is one way to characterize voice samples.

19. Regarding claims 51 and 65, Huat in view of McDonald does not expressly disclose that said determining comprises: determining said divisions based on a movement of lips of a user that produces the utterances represented by the voice data. However, McDonald does disclose that the parsing may be done “in any conventional manner” (col. 4, lines 27-35). Examiner takes official notice that it was well known in the art at the time of invention to parse language based on a movement of lips of a user. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the divisions based on a movement of lips of a user that produces the utterances represented by the voice data. One of ordinary skill in the art at the time of invention would have been motivated to do this to determine the divisions in a conventional manner.

20. Regarding claims 52 and 66, Huat in view of McDonald does not expressly disclose that said determining comprises: determining said divisions based on vibrations of a throat of a user that produces the utterances represented by the voice data. However, McDonald does disclose that the parsing may be done “in any conventional manner” (col. 4, lines 27-35). Examiner takes official notice that it was well known in the art at the time of invention to parse language based on vibrations of a throat of a user. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the divisions based on vibrations of a throat of

a user. One of ordinary skill in the art at the time of invention would have been motivated to do this to determine the divisions in a conventional manner.

21. Regarding claims 53 and 67, Huat in view of McDonald discloses that said determining comprises: determining said divisions based on externally provided instructions (McDonald: col. 4, lines 27-35).

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL J. RYMAN whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Primary Examiner
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